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Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                      Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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1: /SIDS5/gcgdata/ge
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5: /SIDS5/gcgdata/geneseq/geneseqn-emb1/WA1985_DAT: *
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 1.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gaattccctgttgacaatta.....tatctaaggaaatacttaca 121
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  AAZ45324
AAA47190
AAZ45325
AAQ11856
AAQ53901
AAA12878
AAQ53902
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Nucleotide sequenc
Nucleotide sequenc
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Sequence of plasmi
Trp promoter used
Trp promoter, SEO
Lamda CII ribosome
Bacteriophage lamb
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	AAQ66387 AAQ25936	15	172	34.7	442	0142
7 ECORI-C	AAQ13327	12	172 172	34.7	42	
E. coli trp	AAQ28382	13	168	34.7	42	
	AAQ14900	12	167	34.7	42	
	AAQ13117	12	167	34.7	42	
Sequence of	AAN60089	7	167	34.7	42	
	AAN91224	10	166	34.7	42	
	AAC69044	22	151	34.7	42	
Plasmid	AAN20014	w	141	34.7	42	
S	AAN70250	œ	137	34.7	42	
	AAQ13116	12	111	34.7	42	
S	AAN60088	7	111	34.7	42	
trp pro	AAQ79932	16	107	34.7	42	
	AAQ13118	12	107	34.7	42	
	AAN70602	æ	107	34.7	42	
Sequence	AAN70163	œ	107	34.7	42	
Sequence	AAN60090	7	107	34.7	42	
Synthetic	AAN50168	σ	107	34.7	42	
+1	AAN81566	9	105	34.7	42	
9 Synthetic	AAN93089	10	103	34.7	42	
Human SP5	AAN80723	9	103	34.7	42	
Sequence	AAN70717	æ	103	34.7	42	
S	AAN50704	σ	103	34.7	42	
	AAQ03558	11	102	34.7	42	
H	AAN20110	ω	86	34.7	42	
	AAQ31933	13	74	34.7	42	
Sequence	AAN80245	9	47		42	
	AAQ49722	14	305	34.9	٠.	
H	AAN50137	6	63	35.4	42.8	
	AAA73025	21	1519	35.7	43.2	
High	AAV81508	20	1519	٠	43.2	
trp	AAA95073	21	357			
	AAC64251	21	357	36.0	43.6	
Tryptophan	AAT73712	18	77	36.4	44	

ALIGNMENTS

AAZ45324;

27-MAR-2000 (first entry)

AAZ45324 standard; DNA; 121 BP

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RESULT
AAZ45324
ID AAZ4
XX AAZ4
XX AZ4
XX Nucl
XX Tryp
KW Esch
XX Unid
XX Unid Industrial production of heterologous proteins in Escherichia colistrain $\ensuremath{W},\ particularly$ for expressing enzymes -W09964607-A1 Unidentified Tryptophan promoter; Ptrp promoter; heterologous protein expression; Escherichia coli W; industrial protein production; enzyme; nitrilase Nucleotide sequence of the Ptrp promoter WPI; 2000-097541/08 Pierrard J, 08-JUN-1999; 16-DEC-1999. (RHON) RHONE-POULENC NUTRITION ANIMALE. 10-JUN-1998; Guitton C, 98FR-0007474. 99WO-FR01343 Favre-Bulle 0; nitrilase; ss.

Claim 15; Page

36;

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RESULT ANAMA77190
ID ANAMA77190
ID ANAMA77190
XXX ANAMA ACC ANAMA 
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Best Local Similarity
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                        Example
                                                                                                                                                                                                                                                                                                                             11-DEC-1998;
19-JUL-1999;
                                                                      auxotrophs
                                                                                           useful
                                                                                                                 Selecting
                                                                                                                                                                                                                                 Favre-Bulle O,
                                                                                                                                                                                                                                                                     (RHON ) RHONE-POULENC ANIMAL NUTRITION SA.
                                                                                                                                                                                                                                                                                                                                                                                                   10-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JUN-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of the expression cassette of pRPA-BCAT41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200036120-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nitrile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methionine;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents the tryptophan promoter (Ptrp promoter). The promoter was extracted from plasmid pRPA6BCAT6 by restriction digest. The promoter is used to control the expression of a heterologous protein in an expression cassette which is used to modify a strain of Escherichia coli W. The modified strain is then used for industrial production of heterologous proteins. Specifically, the promoter was used to control the expression of an Alcaligenes intrilase gene. The method is especially used to produce proteins of relatively now value, preferably enzymes and specifically nitrilases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 121 BP;
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                                                                                                                                                               AAY93908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hydratase;
                                                  sequences encoding enzymes involved in methionine synthesis, r hydrolysis of nitrile groups, by transforming methionine s and selection for growth
                   Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2-hydroxy-4-methylthiobutanoic acid; nitrilase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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99FR-0009489
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                                                                                                                                                                                                                              Pierrard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37 A; 27 C;
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                   38pp;
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Pred.
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No. 4.2e-29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 121;
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Best Local :
                                     WPI; 2000-097541/08
P-PSDB; AAY54121.
                                                                              Pierrard J,
                                                                                                                                       10-JUN-1998;
                                                                                                                                                                 08-JUN-1999;
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                                                                                                       (RHON ) RHONE-POULENC NUTRITION ANIMALE
                                                                                                                                                                                             16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                      Tryptophan promoter; Ptrp promoter; heterologous protein expression; Escherichia coli W; industrial protein production; enzyme; nitrilase
                                                                                                                                                                                                                                                                                                                       Alcaligenes
                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                       Nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA245325 standard; DNA; 1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ45325;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1793 BP; 412 A; 527 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 a 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tcgacctgcagccaagcttgggcatacattcaatcaattgttatctaaggaaatacttac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gaattccctgttgacaattaatcatcgaactagttaactagtacgcagcttggctgcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaattccctgttgacaattaatcatcgaactagttaactagtacgcagcttggctgcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tcgacctgcagccaagcttgggcatacattcaatcaattgttatctaaggaaatacttac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                      sequence
                                                                                                                                                                                                                                                                                                                       faecalis
                                                                             Guitton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                    98FR-0007474
                                                                                                                                                              99WO-FR01343
                                                                                                                                                                                                                                                                             Location/Qualifiers
123..1193
                                                                                                                                                                                                                                                 /product= "nitrilase"
                                                                                                                                                                                                                                                                '*tag=
                                                                                                                                                                                                                                                                                                                                                                                               of an expression cassette encoding a nitrilase.
                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                           Favre-Bulle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 121; DB 21; Pred. No. 7.5e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            376 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                                                                                                                                                                                                                                                         nitrilase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
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                                                                                                                                                                                                                                                                                                                                                          88
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strain

Industrial production of heterologous strain W, particularly for expressing

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Escherichia coli

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RESULT
AAQ11856
ID AAQ1
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents an expression cassette comprising the tryptophan promoter (Ptrp promoter) and DNA encoding an Alcaligenes faecalis ATCC8750 nitrilase (nitB). The nitrilase polynucleotide and the promoter sequence were extracted from plasmid pRPA6BCAT6 by restriction digest. The Ptrp promoter is used to control the expression of a heterologous protein in an expression cassette which is used to modify a strain of Escherichia coli W. The modified strain is then used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   promoter is used to control the expression of an Alcaligenes nitrilase gene. The method is especially used to produce proteins of relatively low value, preferably enzymes and specifically nitrilases.
co-expressing haemoglobin gene.
                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ11856 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 36-38; 52pp; French
                                         WPI; 1991-164191/22.
                                                                                                             30-OCT-1989;
                                                                                                                                  26-OCT-1990;
                                                                                                                                                          16-MAY-1991
                                                                                                                                                                                 WO9106641-A
                                                                                                                                                                                                                           mat_peptide
                                                                                                                                                                                                                                                                misc_signal
                                                                                                                                                                                                                                                                                                  Vitreoscilla
                                                                                                                                                                                                                                                                                                                       Haemoglobin;
                                                                                                                                                                                                                                                                                                                                              Sequence of plasmid pHbCAT encoding VHb structural haemoglobin gene
                                                                                                                                                                                                                                                                                                                                                                      31-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                             AAQ11856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1793 BP; 412 A; 527 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     industrial production of heterologous proteins. Specifically, the
                                                                                   (CALY ) CALIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tcgacctgcagccaagcttgggcatacattcaattgttatctaaggaaatacttac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaattccctgttgacaattaatcatcgaactagttaactagtacgcagcttggctgcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                        fermentation; brewing;
                                                                                      INST OF TECHN
                                                                                                            89US-0429093
                                                                                                                                  90WO-US06083
                                                                                                                                                                                                               /label= trp promoter
92..529
/*tag= b
                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                    b
Vitreoscilla
                                                                                                                                                                                                                                                                                                                                                                                                                     695
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                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 121; DB 21;
Pred. No. 7.5e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             478 G;
                                                                                                                                                                                                                                         and
                                                                                                                                                                                                       structural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             376 T; 0 other;
                                                                                                                                                                                                                                        synthetic RBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1793;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
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RESULT
AAQ53901
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
ovarian carcinomas. The proteins comprise saporin with an N-terminal extension, the saporin containing protein being cytotoxic upon internalisation by a eukaryotic cell. The N-terminal extension may include a ligand e.g. basic fibroblast growth factor (bFGF), that specifically interacts with a cell surface protein, thus specific cells can be targetted. The N-terminal extension renders the resulting saporin containing protein sufficiently non-cytotoxic to allow recombinant expression. The Trp promoter was used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       By coexpressing a desired DNA sequence in a plasmid with the haemoglobin structural gene, expression may be regulated by the level of disolved oxygen, presence of cAMP-CAP and/or a complex nitrogen source. The method is especially useful in the production of haemoglobins and metabolites, fermentation, brewing, enzymatic
                                                                                                                                                                                   Recombinant fusion proteins contg. saporin extension to permit recombinant expression protein to target cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saporin; restenosis; melanoma;
cytotoxin; fusion protein; targ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Trp promoter used in expression vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 695 BP; 184 A; 147 C; 176 G; 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           degradation, waste treatment etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 47; 84pp; English
                                                                                                                Recombinant fusion proteins containing saporin can be used for treating diseases such as restenosis, human melanomas and human
                                                                                                                                                                                                                                                                                                    (PRIZ-)
(WHIT-)
                                                                                                                                                                                                                                                                                                                                                 16-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptor; cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ53901 standard; DNA; 59 BP
                                                                                                                                                          Example 2; Page 33; 62pp; English
                                                                                                                                                                                                                                               WPI; 1994-007545/01
                                                                                                                                                                                                                                                                           Baird JA,
                                                                                                                                                                                                                                                                                                                                                                          14-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9325688-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 cgac 65
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgac
                                                                                                                                                                                                                                                                                                      PRIZM PHARM INC.
WHITTIER INST DIABETES & ENDOCRINOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66
                                                                                                                                                                                                                                                                        Barthelemy I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fusion protein; targetting; internalisation;
cell surface; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                 92US-0901718
                                                                                                                                                                                                                                                                                                                                                                            93WO-US05702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        48.98;
95.38;
                                                                                                                                                                                                                                                                        Lappi DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 59.2;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      carcinoma; ovarian cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                           Sosnowski BA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .5e-09
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                                                                                                                                                                                                    and opt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
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                                                                                                                                                                                                    an N-terminal
to target the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ligand;
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cc targetted delivery of cytotoxins or prodrug-composition for the CC proliferating cells. The gene delivery composition comprises a protein CC that binds the fibroblast growth factor receptor (FGFR) which is fused CC or chemically conjugated to a nucleic acid binding domain. The nucleic cald binding domain is complexed with a suitable expression construct cencoding a cytotoxin such as saporin. One or more linkers may join the CC FGFR-binding protein to the nucleic acid binding domain. These are CC selected to increase the specificity, toxicity, solubility, serum CC stability or intracellular availability, and may serve to promote condensation of nucleic acids for delivery to a cell. The fusion protein CC binds to FGFR and is internalised by cells that carry this receptor. The CC concensation of nucleic acids for delivery to a cell. The fusion protein CC condensation of nucleic acids for delivery to a cell. The fusion protein CC condensation of such satisfaction is used for the therapeutic alteration of the function, gene expression and viability of cells. In particular, it may be used for the treatment and prevention of cells in particular, it may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-AUG-1994;
13-SEP-1994;
16-MAY-1995;
                                                                                                                                                                                                                             The invention relates to a novel gene delivery composition
                                                                                                                                                                                                                                                                 Example
                                                                                                                                                                                                                                                                                          Gene delivery system, useful for treating or preventing cancer and rheumatoid arthritis, comprises receptor-internalized ligand linked nucleic acid binding domain and nucleic acid -
                                                                                                                                                                                                                                                                                                                                                                                                Chandler
                                                                                                                                                                                                                                                                                                                                                                                                                               (SELE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6037329-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Targetted gene delivery; fibroblast growth factor receptor; FGFFF-binding protein; nucleic acid binding protein; receptor-internalised ligand; cytotoxin; saporin; gene therapy; cytocide; antiproliferative; cancer; melanoma; diabetic retinopathy; rheumatoid arthritis; restenosis, Dupuytren's contracture; psoriasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trp promoter,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA12878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA12878 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 59 BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                              6; Column 145; 131pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                             SELECTIVE
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                                                                                                                                                                                                                                                                                                                                                                                              Sosnowski BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-0297961.
94US-0305771.
95US-0441979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO:62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regulate expression of saporin/bFGF fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-0213446
94US-0213447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-0718904.
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                                                                                                                                                                                                                                                                                                                                                                                                                            GENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alpha-actin; alpha-crystallin; ribosome binding site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; 14 C; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45.3%;
96.6%;
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                                                                                                                                                                                                                                                                                                                                                                                              Baird
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Pred. No. 3
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                                                                                                                                                                                                                                                                                                                                                                                            JA;
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of cell proliferative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proteins
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RESULT
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Best Local
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                                                                                                                                                     Recombinant fusion proteins contg. saporin - having extension to permit recombinant expression and opt.
                                                                                                                                                                                                                                            (PRIZ-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disorders, for example after eye surgery, melanoma and many other sorts of cancer, rheumatoid arthritis, restenosis, Dupuytren's contracture, diabetic retinopathy, psoriasis and eczema. The gene delivery compositions of the invention have high specificity for particular cells and can deliver larger amounts of DNA compared to prior art methods. Sequence AAA12925 represents the human alpha-ctin promoter, and sequences AAA12923-A12924 represent PCR primers used to amplify this promoter. Sequence AAA12934 represents the human alpha-crystallin promoter. Sequence AAA12934 represents the human alpha-crystallin promoter, which was generated using PCR primers AAA12926-A12933. Sequence AAA12878 represents a Trp gene promoter, and sequence AAA12877 represents the CII ribosome binding site of bacteriophage lambda. All these elements may be incorporated into the cytotoxin-encoding DNA construct to be delivered to the cell. Sequence AAA12876 represents an oligonucleotide of undefined function.
                                                                                                                                               protein
                                                                                                                                                                                                                                                                                16-JUN-1992;
                                                                                                                                                                                                                                                                                                       14-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                     W09325688-A
                                                                                                                                                                                                                                                                                                                                                                                                               cytotoxin;
                                                                                                                                                                                                                                                                                                                                                                                                                         Saporin; restenosis; melanoma; carcinoma;
                                                                                                                                                                                                                                                                                                                               23-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                            Lambda phage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lamda
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                                                                                                                                                                                                                                                                                                                                                                                                     receptor; cell
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                                                                                                                                                                                                                    JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CII ribosome
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                                                                                                                                                                                                                                       PRIZM PHARM INC.
WHITTIER INST DIABETES & ENDOCRINOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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                                                                                                                                            target cells
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                                                                                                                                                                                                                                                                                                                                                                                                              fusion protein; targetting; internalisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                              9208-0901718
                                                                                                                                                                                                                                                                                                       93WO-US05702
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding site used in expression
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96.6%;
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Pred. No. 3
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                                                                                                                                                                                                                   Sosnowski
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                                                                                                                                                                                                                                                                                                                                                                                                                          ovarian cancer;
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treating diseases such as restenosis, human melanomas and human ovarian carcinomas. The proteins comprise saporin with an N-terminal extension, the saporin containing protein being cytotoxic upon internalisation by a eukaryotic cell. The N-terminal extension may include a ligand e.g. basic fibroblast growth factor (bFGF), that specific cells can be targetted. The N-terminal extension renders the resulting saporin containing protein enfficients.

Example 2; Page 33; 62pp;

English.

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RESULT
AAA12877
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                    15-MAR-1994;
15-MAR-1994;
29-AUG-1994;
13-SEP-1994;
The invention relates to a novel gene delivery composition for the targetted delivery of cytotoxins or producy converting enzymes to proliferating cells. The gene delivery composition comprises a protein that binds the fibroblast growth factor receptor (FGFR) which is fused or chemically conjugated to a nucleic acid binding domain. The nucleic acid binding domain is complexed with a suitable expression construct encoding a cytotoxin such as saporin. One or more linkers may join the FGFR-binding protein to the nucleic acid binding protein. These are selected to increase the specificity, toxicity, solubility, serum stability or intracellular availability, and may serve to promote condensation of nucleic acids for delivery to a cell. The fusion protein binds to FGFR and is internalised by cells that carry this receptor. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytocide; antiproliferative; cancer; melanoma; diabetic retinopathy;
rheumatoid arthritis; restenosis, Dupuytren's contracture; psoriasis;
eczema; promoter; alpha-actin; alpha-crystallin; ribosome binding site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                Gene delivery system, useful for treating or preventing cancer and rheumatoid arthritis, comprises receptor-internalized ligand linked
                                                                                                                                                                                                                                                                                                   Chandler LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Targetted gene delive FGFR-binding protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteriophage lambda cII ribosome binding site,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteriophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Targetted gene delivery; fibroblast growth factor r
FGFR-binding protein; nucleic acid binding protein;
receptor internalised ligand; cytotoxin; saporin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                        24-SEP-1996;
                                                                                                                                                                                                                                                                                                                              (SELE-) SELECTIVE GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         œ
                                                                                                                                                                                                                   acid binding domain and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          recombinant expression. used in constructs for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     59
                                                                                                                                                                                          Column 65-66; 131pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                   Sosnowski BA,
                                                                                                                                                                                                                                                                                                                                                                    94US-0213446.
94US-0213447.
94US-0297961.
94US-0305771.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lambda
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100.0%;
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                                                                                                                                                                                                                                                                                                  Baird
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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Pred. No.
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                                                                                                                                                                                          English.
                                                                                                                                                                                                                     nucleic
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1.2e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy;
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h 36.4%; Similarity 100.0% 44; Conservative

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Score 44; DB 16; Pred. No. 0.0001; 0; Mismatches C

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PGAM isozymes.

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders, for example after eye surgery, melanoma and many other sorts of cancer, rheumatoid arthritis, restenosis, Duppytren's contracture, diabetic retinopathy, psoriasis and eczema. The gene delivery compositions of the invention have high specificity for particular cells and can deliver larger amounts of DNA compared to prior art methods. Sequence AAA12925 represents the human alpha-actin promoter, and sequences AAA12924 represent PCR primers used to amplify this promoter. Sequence AAA12924 represents the human alpha-crystallin promoter. Which was generated using PCR primers AAA12926-A1293. Sequence AAA12878 represents a Tru gene promoter, and sequence AAA12878 represents the cII ribosome binding site of bacteriophage lambda. All these elements the cII ribosome binding site of bacteriophage lambda. All these elements and sequence AAA12878 represents to the cytotoxin-encoding DNA construct to be
                         and BB respectively. The distinguish between the various diagnostic agent
                                                            This sequence represents the TRP promotor. This sequence was used in a expression vector to express anti-phosphoglycerate mutase (PGAM) M and type isozyme specific IgG antibodies. These antibodies were termed MM and BB respectively. The antibodies MM and BB can be used to detect an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT00582 standard; DNA;
                                                                                                                                                                                           Anti-phospho:glycerate mutase isozyme specific IgG antibodies
                                                                                                                                                                                                                          WPI; 1995-380078/49
                                                                                                                                                                                                                                                                                                                                                                                                                         Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TRP; anti-phosphoglycerate mutase; PGAM; antibody; IgG; isoenzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-MAY-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 59 BP; 20 A; 11 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  function, go
                                                                                                                                                                                                                                                                                                                         25-MAR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                          detect and distinguish between M and B type isozyme(s)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to the cell. Sequence AAA12876 represents an oligonucleotide
                                                                                                                                          Fig
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RESULT
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                                                                                                                                                                    This sequence is the tryptophan promoter which was used to direct CC expression of human bisphophoglycerate mutase (BPGM). Recombinant CC human BPGM was used as an antigen to prepare a novel antibody to CC BPCM. The antibody can be used in immunoassays for BPGM. BPGM, an isozyme CC of mammalian phosphoglycerate mutase (PGAM), catalyses synthesis and CC decomposition of 2,3-bisphosphoglycerate (2,3-BPG), important in CC regulating the oxygen affinity of haemoglobin in red blood cells of CC humans and many other mammals. 2,3-BPG lowers the oxygen affinity of haemoglobin, thereby promoting oxygen supply to tissues, by binding CC directly to haemoglobin and by lowering red blood cell pH. 2,3-BPG levels and iron deficient anaemia and decreased in haemolytic anaemia CC and iron deficient anaemia and decreased in haemolytic anaemia CC andinase deficiency. An immunoassay for BPGM in red blood cells or CC plasma provides a marker adding disease diagnosis e.g. of haemolytic discorders. The antibody has high specificity to human BPGM, allowing CC accurate determination of BPGM.
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Best Local :
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Uchida K;
                                                                                                                                                       Sequence 77
                                                                                                                                                                                                                                                                                                                                                                                                                           Antibody to bis:phospho:glycerate mutase for diagnosis of haemolytic disorders
                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Figure 8; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-365901/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-1996;
19-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bisphosphoglycerate mutase; BPGM; diagnosis; haemolytic disorder; immunoassay; kit; 2,3-bisphosphoglycerate; haemaglobin; anaemia; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ORIY ) ORIENTAL YEAST CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EP785217-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       primer; tryptophan promoter; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tryptophan promoter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT73712 standard; DNA; 77
                               11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kasuya
                                                                                       Conservative
                                                                                                                                                     B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96JP-0337723.
96JP-0024897.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97EP-0400098
                                                                                                                                                    26 A; 16 C; 15 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ~
                                                                                 36.4%; 500
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matuo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                 Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲,
                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mori K,
                                                                                                                                                   20 T; 0 other;
                                                                                                  NO.
                                                                                                 0.0001;
                                                                                                              DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tanigushi Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                       useful in immunoassays
                                                                                     0;
                                                                                                            Length 77;
                                 47
                                                          47
                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                   0;
                                                                                  Gaps
                                                                                  0;
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AAC64251
ID AAC9
XX AAC9
AC AAC9
AC AAC9
AC Trp
CX Trp
CX Gly
XX Gly
XX Gly
XX Gly
XX Gly
XX How
A AG9
RESULT
AAA95073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 46
                                                                       promoter
                                                                                                                                               Unidentifed
                                                                                                                                                                                           Soybean; aminopeptidease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a soybean leucine aminopeptidase (AAB29636), and cDNA encoding it (AAC64250), derived from cotyledon tissue. The invention also relates to variants of soybean cotyledon LAP which retain activity, recombinant vectors and host cells comprising DNA encoding the soybean cotyledon LAP, and a method fro the recombinant production of the soybean cotyledon of the invention can be used for the large scale recombinant preparation of soybean cotyledon leucine aminopeptidase. The present sequence represents a trp promoter used in a soybean cotyledon leucine aminopeptidase bacterial expression construct in an exemplification of the invention.
                                                                                                                                                                                                                                               trp promoter
                                                                                                                                                                                                                                                                                               18-JAN-2001
                                                                                                                                                                                                                                                                                                                                                AAA95073;
                                                                                                                                                                                                                                                                                                                                                                                            AAA95073 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-682117/67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP2000262286-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AJIN ) AJINOMOTO KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycine max;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trp promoter;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trp promoter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAC64251 standard; DNA; 357
                                                                                                                                                                                                                                                                                                                                                                                                                                               12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 aattccctgttgacaattaatcatcgaactagttaactagtacgcagctt 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                attcccctgttgacaattaatcatcgaactagttaactagtacgcaagtt 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L Similarity
46; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 18-19; 22pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₿P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; soybean cotyledon leucine aminopeptidase; LAP; recombinant expression; plasmid construction; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99JP-0068353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99JP-0068353
                                                                     Location/Qualifiers
1..357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95 A; 90 C; 82 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in a soybean cotyledon LAP expression
                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36.0%;
92.0%;
                                                                                                                                                                                                                                                                                                                                                                                               357 BP
                                                                                                                                                                                           seasoning;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 43.6; DB 21
Pred. No. 0.00019;
0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90
                                                                                                                                                                                         R2219_2A; trp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                         promoter;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                construct.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                         SS
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EP1036843-A1

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RESULT 1
AAV81508
ID AAV8
XX AAV8
XX AAV8
XX ITAB
DT 01-A
XX Tran
KW Tran
KW CARI
OS Stre
XX Synt
COS Stre
FH CDS
FT CDS
FT CDS
FT CDS
FT CDS
FT CDS
FT CDS
XX AV8
PN EP81
XX AV8
PN O4-A

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               encoding this protein was isolated by screening a soybean shoot cDNA library using rice EST R2219_2A as a probe. The soybean aminopeptidase cDNA may be used for the mass recombinant production of soybean aminopeptidase, especially in Escherichia coli. The aminopeptidase is useful for producing a highly hydrolyzed product from a highly acidic protein. This may be used for seasoning. The present sequence is the trp promoter. This was used in an aminopeptidase expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding germinating soybean aminopeptidase and recombinant production useful for producing highly hydrolyzed products
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Transglutaminase; microbial; gelled food; jelly; cosmetic; meat quality; microcapsule production; carrier; immobilised enzyme; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-595542/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2000; 2000EP-0105313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High expression transglutaminase gene present in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV81508 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AJIN ) AJINOMOTO CO INC.
     Miwa
                                                                                                                                                  02-JUL-1998;
                                                                                                                                                                                                  07-JAN-1999
                                                                                                                                                                                                                                                   EP889133-A2
                                                                                                                                                                                                                                                                                                                                                                                                                         Streptoverticillium
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV81508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to soybean aminopeptidase. The cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 16;
                                                   (AJIN ) AJINOMOTO CO INC
                                                                                                   04-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             271
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I
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46; Conservative
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Nakamura N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miwa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-0068255
                                                                                                   97JP-0180010
                                                                                                                                                  98EP-0112315
                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers 87..1085
                                                                                                                                                                                                                                                                                                 /*tag=  a
/product= transglutaminase
                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95 A; 90 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA; 1519 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36.0%;
Seguro K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Asano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 43.6; D; Pred. No. 0.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nakamura
Yokoyama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 21;
.00019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ž
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      yogurt; cheese; high thermal st
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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The state of the s

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RESULT 1
AAA73025
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
          Production of active transglutaminase from denatured enzyme by two-stage refolding process for industrial production of active enzyme for use in food production \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used to produce gelled foods (jellies, yogurt and cheeses) or cosmetics, to improve the quality of meat, in the production of materials for microcapsules of high thermal stability and as a carrier for immobilised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Asp from microbial transglutaminase allows efficient removal of the terminal Met residue added when the protein is expressed in E. coll. The E. coll methionine aminopeptidase acts well on Met-Ser but only poorly on Met-Asp, so problems of antigenicity associated with Met-terminated proteins are avoided. Recombinant transglutaminase is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV81521-60, for expression in Escherichia coli. The specification describes a new microbial transglutaminase that has the N-terminal aspartic acid of transglutaminase deleted. Eliminating the N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents the high expression transglutaminase gene present in plasmid pTRPMTG-02. The gene is derived from Streptoverticillium sp., and is codon altered, using oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New microbial transglutaminase with N-terminal aspartic acid - allowing high level recombinant production without added methionine in E. coli, useful in production of gelled foods,
                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                                cneese;
                                                                                                                                                                                                                                                                                                                             Transglutaminase;
                                                                                                                                                                                                                                                                                                                                                        Transglutaminase nucleotide sequence SEQ ID NO:1
                                                                                                                                                                                                                                                                                                                                                                                      24 - NOV - 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA73025 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1519 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 18-23; 56pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB;
                                                                    P-PSDB;
                                                                                 WPI; 2000-475826/41.
                                                                                                            Yokoyama K,
                                                                                                                                                                    28-DEC-1998;
                                                                                                                                                                                                                           13-JUL-2000
                                                                                                                                                                                                                                                        WO200040706-A1
                                                                                                                                        (AJIN ) AJINOMOTO CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14
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DB; AAW67771.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                     AAB12809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                          Ono K,
                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                    98JP-0373131.
                                                                                                                                                                                                 99WO-JP07250
                                                                                                                                                                                                                                                                                                                            gelled food; jelly; yoghurt; gelled cosmetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              355 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35.7%;
93.8%;
                                                                                                            Ej ima
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                                                                                                             Ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 43.2; DB 20 Pred. No. 0.00035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              387 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              427 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
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RESULT 15
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Best Local 9
Sequence 63 BP; 22 A; 13 C; 11 G; 17 T; 0 other;
                      The trp promoter is used in the construction of novel vectors which are used for more efficient protein synthesis in a transformed host.
                                                                       Claim 10; Page 26; 38pp; English.
                                                                                                    Vector having promoter(s) between enzyme cleavage sites - for transforming Escherichia coli to give more efficient protein
                                                                                                                                                WPI; 1985-211449/35.
                                                                                                                                                                                                                                                                                                                                                                                      Key
-35_signal
                                                                                                                                                                        Nakagawa Y, Uno S,
                                                                                                                                                                                                                       02-FEB-1984;
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                                                                                                                                                                                               (GREC ) GREEN CROSS CORP.
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                                                                                                                                                                                                                                                                                                                                             RBS
                                                                                                                                                                                                                                                                      28-AUG-1985
                                                                                                                                                                                                                                                                                                                                                                                                                           Promoter; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAN50137 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for producing active transglutaminase from denatured enzyme. The method comprises: (i) forming an intermediate structure of the enzyme having transglutaminase activity under actidic conditions in an aqueous medium; and (ii) forming a higher-neutral conditions in an aqueous medium; and the can be used for industrial production of active transglutaminase activity under industrial production of active transglutaminase from denatured material industry for the production of gelled foods such as jellies, yoghurts sequence encodes a transglutaminase which is used in the food and cheeses, and for the production of gelled cosmetics. The present from the present invention.
                                                                                                                                                                                                                                                                                                                                                                  -10_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trp promoter
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 48-50; 74pp; Japanese.
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45; Conserv
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                                                                                                                                                                       Nagai M,
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Shine-Dalgarno
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Pred. No. 0.00035;
0; Mismatches 3;
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